## North Carolina Board of Transportation Environmental Planning and Policy Committee Meeting Minutes for October 5, 2005

A meeting of the Environmental Planning and Policy Committee (EPPC) was held October 5, 2005 at 8:30 AM in the Board Room (Room 150) of the Transportation Building. Board Member Nina Szlosberg chaired the meeting. Board of Transportation members that attended were:

Tom Betts Andy M. Perkins
Bob Collier Cam McRae
Marion Cowell Nina Szlosberg
Nancy Dunn Lanny Wilson
Douglas Galyon Arnold Lakey

Conrad Burrell

## Other attendees included:

Bruce Ellis Berry Jenkins Benton Payne David Joyner Mike Pettyjohn C.A. Gardner Ricky Greene Don Lee Allen Pope Joel Setzer M.L Holder Ehren Meister **Roger Sheats** Barry Moose Jon Nance Steve DeWitt Ken Pace Roy Shelton Jay Swain Pat Ivey Mike Cowan Sandy Nance Greg Thorpe Clarence Coleman Victor Barbour Shirley Williams Bob Kopetsky Donnie Brew Mary Pope Furr Marcus Wilner Don Voelker Missy Dickens Carl Goode Secretary Tippett Julie Hunkins Andrew Sawyer

Ms. Szlosberg called the meeting to order at 8:30 AM and circulated the attendance sheet. Ms. Szlosberg accepted a motion to approve the meeting minutes from the August 2005 committee meeting. The minutes were approved as presented.

Ms. Szlosberg began by announcing that today's committee meeting would be a discussion about Context Sensitive Solutions (CSS) and to provide Board Members an update on what was going on in the department in regards to CSS. Ms. Szlosberg then introduced Steve Dewitt, Director of Construction, NC Department of Transportation (NCDOT), to introduce the topic of CSS.

Mr. DeWitt stated that the concept of "Context Sensitive Solutions" started out being known as "Context Sensitive Design," applying only to the planning and design phases of transportation projects. However, the concept has evolved into a much larger initiative incorporating the construction and maintenance phases and is known today as Context Sensitive Solutions. Mr. DeWitt defined Context Sensitive Solutions as "planning,"

designing, constructing and maintaining our roadways with sensitivity to the environment." NCDOT's three guiding principals for CSS are:

- Addressing the transportation need
- Being an asset to the community
- Being compatible with the human and natural environment

The role of DOT with CSS is tremendous when you look at the impact that the department has throughout the state. Focusing on the community needs is important so that the department knows what to address and how to respond to what the public wants. Transportation effects every aspect within the state, and CSS gives the department the opportunity to have a tremendous positive impact in the transportation decision-making process. The department has already done a lot of good things that embrace CSS. Mr. DeWitt provided some national examples of projects that have negatively impacted communities, and, as a result, many states are now having to "fix" these previously poor transportation decisions. He elaborated further on several hypothetical examples in North Carolina where a poor transportation decision could have negatively altered the way communities were developed – both culturally and historically.

Mr. DeWitt noted that Context Sensitive Solutions is a part of our overall environmental stewardship effort. He noted that many of the department's environmental programs, including erosion control, are components to CSS. NCDOT's delegated Sedimentation and Erosion Control Program is an exceptional program that embraces CSS and is recognized nationally. In general, the department has come a long way to become context sensitive. From a construction stand point, it is imperative to have open communication with the community that is being effected by the transportation project. Context sensitive solutions also plays a role in maintenance activities.

In conclusion, Mr. DeWitt provided information about the issue of cost associated with integrating CSS principles during transportation projects. He mentioned that in some cases cost can go up, such as in the Paris Pike case in Kentucky. However, Kentucky realized this was the right thing to do and they were able to integrate the cost into the budget early in their process. Mr. DeWitt noted that CSS does not always mean an increase in cost. He used the example of the department's bridge replacement program. Often times the biggest and widest bridge is automatically constructed in a community without necessarily addressing a community's desire or needs. If the department looked at the context of the situation, and with sensitivity, the solution may have been different, reducing the cost of the project. In summary, the use of CSS does not always mean an increase in cost, and may produce a better solution to the transportation need.

Ms. Szlosberg thanked Mr. Dewitt for his opening remarks and introduced Pat Ivey, Division Engineer for Highway Division 9. Mr. Ivey gave a brief introduction and some background information on the replacement of the Innes Street Bridge in Salisbury. Mr. Ivey then introduced Mr. Dan Mikkelson with the City of Salisbury.

Mr. Mikkelson stated that a large part of this bridge replacement project process was convincing the citizens that the bridge had to be replaced. It was a difficult task since one

of the City Council Members went under the bridge and told the citizens that it could withstand a bomb blast. The bridge report stated that the deck was rated poor, the superstructure poor, the substructure fair, and that the estimated life of the bridge was six (6) years. The public was finally convinced that the bridge had to be replaced.

The area of Innes Street where the bridge is located is the primary access to historic downtown from I-85 and serves as a functional main street. The area carries about 25,000 vehicles per day, which if the lanes were narrowed, would have resulted in over a mile of congestion during rush hour. The bridge itself is within sight of three different buildings which are included in the National Register of Historic Places. The entire area around the bridge is historic and is held in high regard level by the citizens of Salisbury.

Some of the items that were identified as important to the locals were:

- appearance from all views
- wide sidewalks
- narrow travel lanes
- timing of construction with the construction of I-85
- open railings and decorative lights on the bridge
- traffic management
- a "sense of place"

Mr. Mikkelson then turned the presentation over to Missy Dickens, Staff Engineer with the Program Development Branch of NCDOT and former Project Engineer for the Innes Street Bridge Replacement Project, to discuss the department issues with the project.

Some of NCDOT's issues, other than public safety and traffic flow, were the historic property laws. Federal funding was involved in this case, which provided a challenge. The driveway access to the historic Bernhardt home (adjacent to the bridge) had to be taken out with the construction of the new bridge. If this had been a non-historic home NCDOT would have paid the owner damages, but since it was historic, it was important to avoid or mitigate the adverse effect. NCDOT tried to maintain flexibile with the contractor, which can be advantageous as it allows the contractor to be resourceful and creative to find solutions that are economical. Generally, the more specifications in the contract, the higher the price tag. While the project had some key issues that were not easy to resolve, they were resolved and resulted in win-win solutions. The key negotiated issues with the city were: construction duration, sidewalk width and amenities, and cost sharing.

NCDOT proposed to close down Innes Street and route traffic off site so they could accomplish the work more quickly. The city was worried about the economic impacts to the businesses on the street, so they wanted NCDOT to maintain traffic on site. They compromised and maintained traffic in the westbound direction only, and re-routed eastbound traffic. The businesses were skeptical at first, but in the end were very pleased with the situation.

There was a lot of public outreach conducted as a part of this project. The city took ownership of the project and took initiative in engaging the public, which was very

positive. Ms. Dickens commented that projects are always better when the city gets so involved and takes ownership early in project development.

Ms. Dickens discussed the bridge's new construction features and cost sharing decisions. The city requested twelve-foot wide sidewalks, but in order to do that the cost would go up and the impacts would be greater to the surrounding area. NCDOT worked with the city and agreed to construct the widest sidewalk possible without deepening the bridge girder depth, which turned out to be about 8 feet. NCDOT picked up the cost of the sidewalk while the city picked up the cost of the aesthetic treatment on top. The city paid for the lights and the NCDOT paid for the pedestals. NCDOT paid for the median on the bridge and the city paid for the aesthetic treatment within the medium (planters). The same aesthetic treatment was included on the sidewalks and paid by the city. NCDOT paid for bridge open railings and embossed walls. Ms. Dickens noted that the walls and rails turned out very beautiful. She also noted that the high retaining walls adjacent to the bridge were constructed for pedestrian safety. These walls included decorative handrails that were paid 50/50 by the city and state. A new retaining wall was constructed that was built adjacent to an existing wall in the adjoining park. The new wall used an aesthetic treatment that was made to look like the stone on the existing wall. NCDOT picked up the cost of the new retaining wall.

Ms. Dickens commented that this project was not without its difficulties and that there were initial conflicts and doubts about the success of the project. However, she commented that great things always come with hard work. Mr. Mikkelson and Mr. Ivey had some final comments.

Mr. Mikkelson stated that he could not take the credit for the vision as it was not his -- it was the community's. He was just the middleman. The community knew what they wanted and spoke in terms of what their interests were. They were flexible and knew what was important. NCDOT and the City of Salisbury had very different initial perspectives on the bridge. In reality, the City of Salisbury has to live with the bridge for the next fifty years and has to cope with the construction while the bridge was being replaced. NCDOT has to get the bridge replacement completed on time, within budget, and has to abide by all federal and state guidelines. Both sides listened to each other. Mr. Mikkelson noted that you have to learn to understand the other party's perspective.

Mr. Ivey reiterated that this cooperation and compromise was the key to this project's success. The resident engineer for the project really enjoyed working on this project because it gave him the opportunity to do some things that they do not normally do. Everything worked out well with this project because everyone worked out their differences and worked toward a common goal.

Ms. Szlosberg introduced the next speaker, Don Lee, State Roadside Environmental Engineer, to provide a program perspective of CSS. Mr. Lee began by noting that over the years, CSS gravitated out of the NEPA process for pre-construction activities. To implement many of the CSS techniques, the Roadside Environmental Unit looks to the division staff for help. With the support of the Division's and each Division Engineer's guidance, the department is able to get its hands around environmental stewardship

implementation. Mr. Lee noted that his presentation would summarize the sequence of programs his unit administers and the decision-making that collaboratively takes place in the field. He noted that NCDOT is very visible throughout the state and sometimes gets too focused with its work and becomes insensitive to its neighbors and our perceptions. Chief Engineer Steve Varnedoe mentioned this in a earlier staff meeting and that the department needs to think about this. This is exactly what CSS is attempting to accomplish.

Mr. Lee then presented to the committee several project examples that showcase the CSS principles in a programmatic approach. He elaborated on six projects:

- 1. Secondary Road Construction Project in Division 8 protected an endangered species of sunflowers along the shoulder by safely relocating.
- 2. Clayton Bypass in Division 4 project had water quality concerns and species concerns because of the Dwarf Wedge Mussel. NCDOT voluntarily implemented water quality monitoring stations and a new erosion control plan.
- 3. Sedgefield Lakes along the Greensboro Urban Loop in Division 7 community was concerned about degradation to the lakes, so NCDOT placed emphasis and stakeholder needs through the Sedimentation and Erosion Control Plan and on water quality monitoring.
- 4. Hydro Demolition in Division 1 a relatively new bridge demolition process was used in Bertie County on Bridge #7 that involved recycling of waste water to rehab the bridge, greatly reducing the environmental impacts, construction duration, and cost.
- 5. Green Rest Area in Division 11 will be constructed on US 421 and be safe, environmentally responsible, sustainable, fiscally sound, and meet the customer needs. When complete the facility may be identified as the first NCDOT building in the nation to be environmentally LEED certified.
- 6. Clear Zone Improvement Program a statewide approach that produces safer, clearer and more aesthetically pleasing transportation facilities. The concept is a visible solution to encroaching overstory along roadways while providing a safe recovery zone that is economical to implement.

Mr. Lee concluded his presentation by saying that NCDOT is already a national leader in these type of efforts and that the department must continue to do so by focusing on its customer needs – the CSS principles. He ended with the quote, "NCDOT must work to make its projects fit into the human and natural environment, rather than alter the environment to fit its projects."

Ms. Szlosberg thanked Mr. Lee for his presentation and introduced Julie Hunkins, Director, Office of Environmental Quality, as the next presenter. She stated that she would provide information on what the department is doing to reinforce the paradigm shift that Mr. Lee was talking about – to have our projects fit into the environment rather than altering the environment to fit our projects. The intent is to get the department to look at CSS as a way of doing business, rather than just something else to do.

The department has a CSS program. Some things that have been included in the program are a 3-day training course that covers how CSS can be applied to long range transportation planning, project development, design, construction, maintenance and operations. The course has been taught for a few years and has been delivered to over 1,200 people in the department, as well as resource agencies, local government and consultants that work with the department. The course will continue to be offered, and the first regional CSS course will be taught in Asheville this fall. Based on some feedback received from the course, we are finding that we need better guidance in the areas of operations, maintenance and construction on how to implement some of the CSS principles. We are beginning to develop some training for those areas, and those courses will be delivered in the fall of 2006.

With grants from FHWA and in partnership with the Center for Transportation and the Environment (CTE), NCDOT is developing an undergraduate and a graduate course that will teach students about CSS before they get into the professional world. NCDOT also sponsors a "CSS Summer Academy" for undergraduate students. Eight undergraduate students participated in the pilot summer internship program. For two weeks, the students are educated in CSS and work in the department on CSS related projects across the state

Ms. Hunkins concluded that if anyone would like more information about these CSS programs she can follow up with a more detailed presentation at a later date or provide information through email or another means.

Ms. Szlosberg thanked Ms. Hunkins for her comments and asked Deputy Secretary Roger Sheats to make an announcement.

Mr. Sheats informed the committee that the department has received another environmental award. NCDOT was recently recognized with an honorable mention in AASHTO's Smart Growth Award Competition for the Hillsborough Street Partnership in Raleigh. He commented that this project embraces the three CSS principles discussed during the meeting. He noted that copies of the AASHTO recognition program noting NCDOT's accomplishment were distributed to Board Members.

Ms. Szlosberg accepted a motion to adjourn the meeting at 9:30 AM.

The next meeting for the Environmental Planning and Policy Committee is scheduled for Wednesday, November 30, 2005 at 8:30 AM in the Board of Transportation Room (Room 150) of the Transportation Building.

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